Material Safety Data Sheets

Fort Wainwright, Alaska
Environmental Officer Course
2011

Outline

I. Description
II. Required Information
III. Material Safety Data Sheets
IV. MSDS Access
V. Summary

MATERIAL SAFETY DATA SHEETS

Description

MSDS No: 299	MATERIAL SAFETY DATA SHEET	Page 1 of 2

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CRAZY CHAMELEON
56 Elm Street
Pittsfield MA 01201 USA

Company Telephone Number: 1-877-442-7723
24-Hour Emergency Phone: InfoTrac 1-800-535-5053

PRODUCT NAME: BMX1000 PHOTONIC MARKING FORMULATION MSDS NO: 299
CHEMICAL NAME: Polymethylmethacrylate Microsphere Suspension in De-Ionized Water

SECTION 2 – COMPOSITION INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	TLV	% w
Polymethylmethacrylate (PMMA)	9011-14-7			97.5
Proprietary Fluorescent Dye				2.5

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
POTENTIAL HEALTH EFFECTS
EYES: Can cause irritation due to physical contact.
SKIN: Practically negligible or none.
INHALATION: Dry powder form inhalation of material can cause coughing.
INGESTION: Practically negligible or none.
CHRONIC EFFECTS:
SIGNS & SYMPTOMS:
CARCINOGENECITY: [No] NTP? [No] IARC MONOGRAPHS? [ND] OSHA?

SECTION 4 – FIRST-AID MEASURES

INHALATION: Although no adverse effects anticipated by breathing during proper handling, if breathing difficult give oxygen and get medical attension.
EYES: Immediately flush with flowing water for 15 minutes. If redness, itching or a burning sensation develops, get medical attention.
SKIN: Normally no treatment required. Wash material off with water.
INGESTION: Normally no treatment required.
NOTE TO PHYSICIANS:

SECTION 5 – FIRE-FIGHTING MEASURES

FLASH POINT (TCC): None FLAMMABLE LIMIT (air, % by vol.) UPPER: NA LOWER: NA
FLAMMABILITY CLASSIFICATION (CFR 1910.1200):
EXTINGUISHING MEDIA: Water fog, foam, dry chemical or carbon dioxide.
FIRE FIGHTING INSTRUCTIONS: During emergency conditions, to prevent overexposure to thermal decomposition products, self-contained breathing apparatus should be worn.
UNUSUAL FIRE & EXPLOSION HAZARDS:
HAZARDOUS COMBUSTION PRODUCTS: Toxic gases such as carbon monoxide may be released in a fire.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

In case material is released or spilled, mop up, place in appropriate container and hold for waste disposal.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Observe normal warehouse handling procedures.
STORAGE: Store in a cool, dry and dark place. Store away from other materials which may cause cross-contamination.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Eye wash station near work area.
EYE/FACE PROTECTION: Use safety glasses.
SKIN PROTECTION: None normally needed.
RESPIRATORY PROTECTION: None normally needed.
EXPOSURE GUIDELINES:

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Aqueous suspension of intense red, pink, orange and other colors including opaque white with faint or none detectable odor.
BOILING POINT: NA
VAPOR PRESSURE: NA
SPECIFIC GRAVITY (H2O=1): 1.96
PERCENT VOLATILES: NA

Description

- Describes the physical and chemical properties of products, their physical and health hazards, and precautions for safe handling and use.
- Must be maintained for each hazardous chemical on the chemical inventory.
- Regardless of the format, the HAZCOM Standard (29 CFR 1910.1200) requires certain information.

Required Information

- Chemical Identity
  - Chemical, trade, and common name(s).
- Hazardous Ingredients
  - Health or physical hazards which comprise 1% or more of the mixture must be listed
  - Carcinogens which comprise 0.1% or more must be listed

Required Information

- Physical and Chemical Characteristics
  - Boiling and Freezing Points
  - Density
  - Vapor Pressure
  - Specific Gravity
  - Solubility
  - Volatility
  - General Appearance
  - Odor

Required Information

- Physical Hazards
  - Conditions under which product could ignite or explode
  - Recommended extinguishing agents and fire fighting methods
  - Chemical incompatibilities
  - Decomposition products

Required Information

- Health Hazards
  - Carcinogenicity, corrosives, irritants, sensitizes, toxicity, mutagenicity, teralogenicity, and target organ effects such as liver, kidney, nervous system, blood, lung, mucous membranes, reproductive skin, and eye effects
  - Route of entry, OSHA PEL, ACGIH TLV, and if listed as carcinogen by OSHA, NTP, or IARC.

Required Information

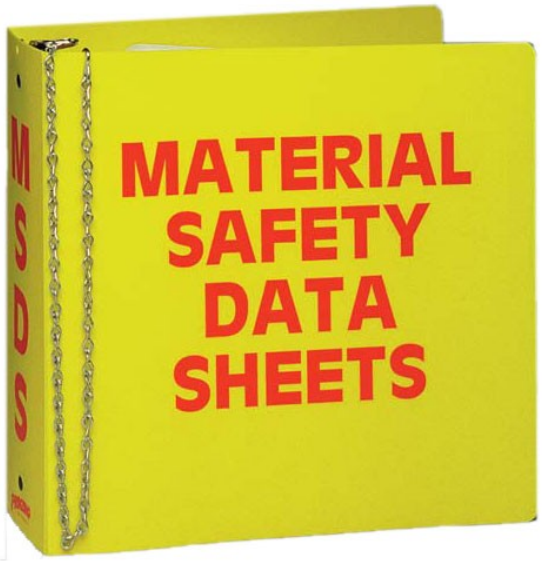
- Special Precautions
  - Spill, leak, and cleanup procedures
  - Precautions for safe handling and use
  - Industrial hygiene practices
  - Precautions to be taken during maintenance and repair of equipment
  - EPA waste disposal methods
  - State and local requirements

Required Information

- Control Measures
  - Engineering controls
  - Safe handling procedures
  - Personal protective equipment
- Emergency and First Aid
  - Actions to be taken in case of accidental overexposure

Required Information

- Responsible Party
  - Usually the manufacturer of the chemical and the 24 hour 1-800 contact number



Material Safety Data Sheets

- Army activities producing or compounding hazardous materials will write or acquire an MSDS. Original sheets must be completed by technically competent persons (chemists, chemical engineers, and industrial hygienists)

Material Safety Data Sheets

- MSDSs for Army-managed items are found in the Defense Hazardous Materials Information Resource System (HMIRS)
- If MSDSs are not received with the shipment of a locally purchased hazardous chemical, the appropriate supervisor will contact procurement official who will follow up with the supplier to obtain a satisfactory MSDS.

Material Safety Data Sheets

- MSDSs may also be obtained from ECC and/or DOL's Hazardous Material Control Point.
- Identification of a hazardous material and correct matching to its MSDS is required. Critical differences exist between similarly named chemicals and products.

Material Safety Data Sheets

- Personnel will have ready access during each work shift to MSDSs applicable to their work area. Accessibility will be achieved by placing copies in the immediate work area or by providing rapid response from a centralized M

Material Safety Data Sheets

- Persons who have questioned the safety of a material will not be required to use it until an approved MSDS is provided and the hazards and protective procedures explained.
- Occupational health and/or safety personnel can provide explanations of MSDS to supervisors and affected workers upon request.

Material Safety Data Sheets

- Workplace supervisory personnel will prepare SOPs that identify the use of chemical compounds and the safe handling procedures, measures, and protective clothing equipment employees must use.

Material Safety Data Sheets

- MSDSs for hazardous chemicals should be reviewed by logistics, fire protection, safety, health, and environmental personnel, and others as appropriate, prior to workplace use.

Material Safety Data Sheets

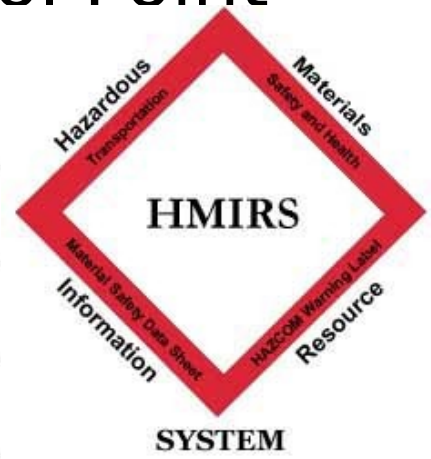
- Protection of trade secret information is required.
- Information in HMIRS will be treated as For Official Use Only (FOUO) information.

MSDS Access

- http://www.dlis.dla.mil/HMIRS/

  Environmental Compliance Consultants
  TEL: 356-2023

  DOL Hazardous Material Control Point
  TEL: 361-4219



Summary

- MSDSs are a critical component of a HAZCOM Program.
- MSDSs contain important information about the safe use and handling of a hazardous material.

END

INSTALLATION MANAGEMENT COMMAND

IMCOM
SOLDIERS • FAMILIES • CIVILIANS

"Sustain, Support and Defend"